### 10/537837 Rec'd PCT/PTO 06 JUN 2005

#### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization International Bureau



### 

## (43) International Publication Date 24 June 2004 (24.06.2004)

### **PCT**

# (10) International Publication Number WO 2004/054181 A1

(51) International Patent Classification7:

\_\_\_\_

H04L 12/56

(21) International Application Number:

PCT/GB2003/005205

(22) International Filing Date:

27 November 2003 (27.11.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 0228520.3

6 December 2002 (06.12.2002) GB

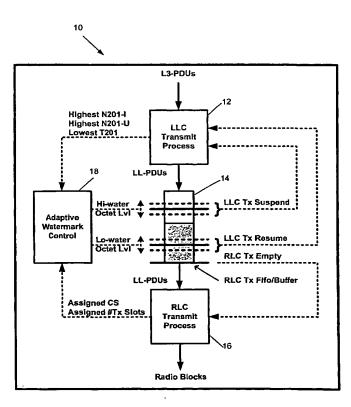
- (71) Applicant (for all designated States except US): QUAL-COMM INCORPORATED [US/US]; T-160D, 5775 Morehouse Drive, San Diego, CA 92121-1714 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ROBINSON, Nigel

[GB/GB]; Qualcomm (UK) Limited, Spectrum Point, 2nd Floor, 279 Farnborough Road, Farnborough, Hampshire GU14 7LS (GB).

- (74) Agents: DUNLOP, Hugh, C. et al.; R.G.C. Jenkins & Co., 26 Caxton Street, London SW1H 0RJ (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,

[Continued on next page]

(54) Title: A METHOD OF AND APPARATUS FOR ADAPTIVE CONTROL OF DATA BUFFERING IN A DATA TRANSMITTER



(57) Abstract: A data transmitter (10) divides incoming data for transmission into data blocks and passes them in frame transmission order to a radio link stage (16) via a serial frame buffer (14). The buffer (14) holds the data frames until the radio link stage (16) is able to transmit them. The incoming data has associated with it various parameters. The radio link stage (16) has allocated to it radio link resources. The parameters and resources, which change independently of each other from time to time, are supplied to a controller (18) which calculates high and low buffer levels therefrom. The controller (18) controls the passing of the data frames through the frame buffer (14) to maintain the number of frames in the buffer at any instant of time at a level between the calculated high and low levels.



### Published:

with international search report

SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.